To: 2004 Water District 34 file

From: Jennifer Berkey

Date: July 1, 2004

On July 1, 2004, Brad Vande Kamp, the Hydrologic Technician from the USGS Idaho Falls Field Office who operates the Howell Gage, called me regarding the status of the Howell Gage. I told him that I had viewed the gage readings on their website and had noticed that it appears to be performing much better since he replaced the line yesterday. Brad said that he had reviewed the data preceding June 22 with one of his coworkers and they had discussed that they would likely be estimating data between June 13 and June 22 using trends observed at the North Fork gage. For the period of June 19 to June 21, they estimate the daily means would have been 480 cfs, 498 cfs, and 460 cfs. Of course, they will not be estimating the daily maximums or daily minimums. On June 22, 2004, the current meter measurement Brad made was 496 cfs.

I asked Brad about the data between June 22 and July 30, because I had understood that he had applied another gage shift to the data after his July 30 visit. He explained that he had already applied a gage shift to the data using the jump he observed in the telemetered data for July 23. His observations during the July 30 site visit just confirmed that the gage shift he had already applied was appropriate. I asked Brad if the 15-minute data between June 13 and June 30 would be adjusted any further. He stated that those data would not be adjusted any further.

On July 1, 2004, I then called Bob Duke, Watermaster of Water District 34, to find out if he knew about the gage problems and if he had received inquiries from water users. Bob said that he had found out about the corrected 15-minute data yesterday and had talked to Brad from the USGS. Bob had also observed that the corrected 15-minute data shows that the minimum daily discharge was below 450 cfs on June 19 - 21, 2004 and that the river "disconnected" on June 21, 2004. Bob had also observed that the maximum discharge recorded by the gage had exceeded 750 cfs on June 28-30, but that these are anomalous spikes that are not consistent with the adjoining 15-minute readings. Bob said that he was planning to go above the reservoir with Larry, a new ditch rider he has hired, to resume delivery of water to users above the reservoir. It is Bob's judgement that the spikes on June 28-30 are not representative of the flow in the river, and that the people above the reservoir have already been curtailed 9 days more than they would if been if the corrected gage data had been available at that time. I told Bob that I agreed with his decision.